



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-0738; Directorate Identifier 2013-CE-022-AD; Amendment 39-17568; AD 2013-17-04]**

**RIN 2120-AA64**

**Airworthiness Directives; Various Aircraft Equipped with Rotax Aircraft Engines 912 A Series Engine**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments

**SUMMARY:** We are adopting a new airworthiness directive (AD) for various aircraft equipped with Rotax Aircraft Engines 912 A Series Engine. This AD results from mandatory continuing airworthiness information (MCAI) issued by the aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as oil leaks in the intake channel in the area of the valve guide on some cylinder heads could increase the oil consumption and result in engine stoppage. We are issuing this AD to require actions to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact BRP-Powertrain GmbH & Co. KG, Welser Strasse 32, A-4623 Gunskirchen, Austria; phone: +43 7246 601 0; fax: +43 7246 601 9130; Internet: <http://www.rotax-aircraft-engines.com>. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Sarjapur Nagarajan, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4145; fax: (816) 329-4090; email: sarjapur.nagarajan@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued AD No. 2013-0117-E, dated May 30, 2013 (referred to after this as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

During a production test run, a non-compliance of the installed cylinder head assembly of cylinder no. 2 and 3 (2/3) was detected, which may result in a latent defect on a limited number of engines. The affected cylinder heads may not have been manufactured in accordance with the specification.

This condition, if not detected and corrected, could lead to an oil leak in the intake channel in the area of the valve guide. The affected non-conforming cylinder heads may have small machined through holes, which can increase the oil consumption and can lead to oil starvation, possibly resulting in engine stoppage or in-flight engine shutdown and forced landing, with consequent risk of damage to the aeroplane and injury to occupants.

To address and correct this potential unsafe condition, EASA issued Emergency AD 2013-0055-E to require a one-time inspection of the affected cylinder head assemblies, known to be installed on certain s/n engines and, depending on findings, replacement of the cylinder head assembly.

Since that AD was issued, it was found that more engines are likely to have an affected cylinder head assembly installed than initially determined. In addition, it has been found that some affected cylinder head assemblies, identified by Part Number (P/N) 623682 and P/N 623687, have inadvertently been supplied as spares, between 31 January 2013 and 28 May 2013.

For the reasons described above, this AD retains the requirements of EASA AD 2013-0055-E, which is superseded, but expands the Applicability to all engines, as it cannot be determined in which s/n engines the affected spare cylinder head assemblies are installed.

This AD also prohibits installation of an affected cylinder head assembly on an engine, or a replacement engine on an aeroplane, unless the affected cylinder head assembly of that engine is inspected as required by this AD.

You may obtain further information by examining the MCAI in the AD docket.

#### **Relevant Service Information**

Rotax Aircraft Engines BRP has issued Alert Service Bulletin ASB-912-062R2, Revision 2 and ASB-914-044R2, Revision 2 (co-published as one document), dated May 29, 2013. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

#### **FAA's Determination and Requirements of the AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all information provided by the State of Design Authority and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

#### **FAA's Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because an oil leak in the intake channel in the area of the valve guide on some cylinder heads could increase the oil consumption and result in engine stoppage. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2013-0738; Directorate Identifier 2013-CE-022-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

### **Costs of Compliance**

We estimate that this AD will affect 50 products of U.S. registry. We also estimate that it would take about .5 work-hour per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour.

Based on these figures, we estimate the cost of the AD on U.S. operators to be \$2,125, or \$42.50 per product.

In addition, we estimate that any necessary follow-on actions would take about 1.5 work-hours and require parts costing \$2,500, for a cost of \$2,627.50 per product. We have no way of determining the number of products that may need these actions.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

“Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new AD:

2013-17-04 **Various Aircraft:** Amendment 39-17568; Docket No. FAA-2013-0738;

Directorate Identifier 2013-CE-022-AD.

#### **(a) Effective Date**

This airworthiness directive (AD) becomes effective [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to all serial numbers of the airplanes listed in table 1 of paragraph (c) of this AD, that are:

- (1) equipped with a Rotax Aircraft Engines 912 A series engine with a part number (P/N) 623682 cylinder head assembly (2/3) installed; and
- (2) certificated in any category.

**Table 1 of Paragraph (c) – Affected Airplanes**

<b>Type Certificate Holder</b>	<b>Aircraft Model</b>	<b>Engine Model</b>
Aeromot-Indústria Mecânico-Metalúrgica Ltda	AMT-200	912 A2
Diamond Aircraft Industries	HK 36 R “SUPER DIMONA”	912 A
DIAMOND AIRCRAFT INDUSTRIES GmbH	HK 36 TS and HK 36 TC	912 A3
Diamond Aircraft Industries Inc.	DA20-A1	912 A3
HOAC-Austria	DV 20 KATANA	912 A3
Iniziativa Industriali Italiane S.p.A.	Sky Arrow 650 TC	912 A2
SCHEIBE-Flugzeugbau GmbH	SF 25C	912 A2

**(d) Subject**

Air Transport Association of America (ATA) Code 72: Engine – Reciprocating.

**(e) Reason**

This AD results from mandatory continuing airworthiness information (MCAI) issued by the aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as oil leaks in the intake channel in the area of the valve guide on some cylinder heads, which could increase the oil consumption and result in engine stoppage. We are issuing this AD to detect and correct excessive oil consumption, which could result in engine stoppage.

**(f) Actions and Compliance**

Unless already done, do the following actions.

(1) Within the next 5 hours time-in-service (TIS) after [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD) or within the next 20 days after [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), whichever occurs first, inspect the cylinder head assembly of cylinder 2 and 3 (2/3) for excessive oil consumption following Section 3 of Rotax Aircraft Engines BRP Alert Service Bulletin ASB-912-062R2 and ASB-914-044R2 (co-published as one document), Revision 2, dated May 29, 2013.

(2) During the inspection required in paragraph (f)(1) of this AD, if excessive deposits (oil or carbon) are found on the spark plugs, before further flight, replace the affected cylinder head assembly with a serviceable one. Do the replacement following Section 3 of Rotax Aircraft Engines BRP Alert Service Bulletin ASB-912-062R2 and ASB-914-044R2 (co-published as one document), Revision 2, dated May 29, 2013.

(3) As of [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), only install an engine



affected by this AD provided it has been inspected as specified in paragraph (f)(1) of this AD and corrected as specified in paragraph (f)(2) of this AD.

(4) As [INSERT DATE 20 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), any spare cylinder head assembly P/N 623682 installed must be inspected within 5 hour TIS after installation following Section 3 of Rotax Aircraft Engines BRP Alert Service Bulletin ASB-912-062R2 and ASB-914-044R2 (co-published as one document), Revision 2, dated May 29, 2013, and corrected as necessary.

**(g) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Sarjapur Nagarajan, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4145; fax: (816) 329-4090; email: sarjapur.nagarajan@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

**(h) Related Information**

Refer to MCAI European Aviation Safety Agency (EASA) AD No. 2013-0117-E, dated May 30, 2013, for related information, which can be found in the AD docket on the Internet at <http://www.regulations.gov>.

**(i) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Rotax Aircraft Engines BRP Alert Service Bulletin ASB-912-062R2, Revision 2, dated May 29, 2013.

(ii) Rotax Aircraft Engines BRP Alert Service Bulletin ASB-914-044R2, Revision 2, dated May 29, 2013.

Note 1 to paragraph (i)(2): Rotax Aircraft Engines BRP Alert Service Bulletins ASB-912-062R2, Revision 2, dated May 29, 2013; and ASB-914-044R2, Revision 2, dated May 29, 2013, are co-published as one document.

(3) For Rotax Aircraft Engines service information identified in this AD, contact BRP-Powertrain GmbH & Co. KG, Welser Strasse 32, A-4623 Gunskirchen, Austria; phone: +43 7246 601 0; fax: +43 7246 601 9130; Internet: <http://www.rotax-aircraft-engines.com>.

(4) You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the

National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Kansas City, Missouri on August 14, 2013.

John Colomy,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2013-21329 Filed 09/03/2013 at 8:45 am; Publication Date: 09/04/2013]